

L 23354-66 EWP(e)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(1)/EWA(h)
IJP(c) JD/WW/JG/WH
ACC NR: AF6008102 (A) SOURCE CODE: CZ/0091/65/000/003/0028/0040

AUTHOR: Prochazka, V. (Engr.; Candidate of Sciences); Navara, E. (Engr.; Candidate
of Sciences); Miskovic, V. (Engr.; Kosice)

ORG: [Miskovic] VST Kosice

TITLE: Effect of some admixtures on the thermal stability of sintered friction
materials

SOURCE: Pokroky praskove metalurgie VUPM, no. 3, 1965, 28-40

TOPIC TAGS: powder metallurgy, heat resistance, cermet product, quartz, alumina,
creep, friction coefficient

ABSTRACT: Efficient iron-base friction materials["] should work reliably at temperatures
of 1000-1100°C without substantial or sudden changes in their friction properties.¹
A study was made to determine what effect the addition of powdered barite, quartz,² or
alumina to iron-graphite³ powders would have on the friction properties of pressed
(rolling at 5 MP/cm² pressure) and sintered specimens. The sintered compressed speci-
mens were tested in the SFM apparatus⁴ described previously (Pokroky praskovej metalur-
gie, c.3, 1964, str. 14.). Tests on the effect of BaSO₄ were made with a specimen
containing 9, 12, 14, 16 and 18% BaSO₄ with 6% graphite in each specimen. The addition
of BaSO₄ increased the resistance to wear at high temperatures. The specimens with 14%

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ACC NR: AF6008102

BaSO₄ held for 5 minutes with a creep rate of 5.2m/sec., whereas the addition of 16% prolonged the testing time to 10 minutes and specimens containing 18% BaSO₄ held for the entire testing time (15 min.). With all additions friction heat was stabilized at 800C. Increasing the creep rate to 6.5m/sec. caused a failure of the material containing 18% BaSO₄ after 2 minutes. At a low creep rate (0.26m/sec.), the addition of BaSO₄ decreased the value of the friction coefficient from 0.52 to 0.35 at a friction temperature of 120C in all cases. At a higher creep rate (2.6m/sec.), the addition of BaSO₄ did not affect the friction coefficient (0.2 at a friction temperature of 400C). But the addition of BaSO₄ decreased the compression strength from 68.8 kp/mm² with 12% BaSO₄ to 28.0 kp/mm² with 18% BaSO₄. The Brinell hardness decreased simultaneously from 44 to 40.5 kp/mm². The addition of SiO₂ and Al₂O₃ also affected the friction property of the friction materials favorably, but in a different way. The SiO₂ decreased the heat conductivity of the friction material because of a partial reduction and dissolution of Si in the iron. This increased the friction temperature to 800C at a relatively low creep rate (3.9m/sec.) in the specimen containing 10% SiO₂. The decrease in the amount of bound carbon occurred simultaneously with the dissolving of the Si. This worsened the friction property of the material so that an unfavorable effect of SiO₂ was observed with >4% SiO₂. The Al₂O₃ did not change the basic structure of the friction material and noticeably increased the thermal stability of the material. The specimens containing 2-10% Al₂O₃ passed all tests without failure. Thus Al₂O₃ is the most appropriate addition to iron-base friction materials. Orig. art. has 12 fig. and 2 tables.

SUB CODE: 11
Card 2/2 JC

SUBM DATE: none/ ORIG REF: 005/ Sov REF: 002/ OTH REF: 001

CZECHOSLOVAKIA

PROCHAZKA, V.; KAVKA, F.; PRUCHA, M.; PITRA, J.; Research Institute for Natural Drugs (Vyzkumny Ustav Prirodnich Leciv), Prague.

"Separation and Quantitative Determination of Alkaloids from Ergot of the Ergotoxine Type."

Prague, Ceskoslovenska Farmacie, Vol 15, No 7, Sep 66, pp 363-366

Abstract /Authors' English summary modified/: The method described uses paper and thin-layer chromatography. Thin-layer chromatography using wide-pore silica gel impregnated with formamide and alkalized with ammonia is used to separate ergosine, ergocristine, ergocornine, ergokryptine and the alkaloid EK 115; systems using benzene and an aliphatic hydrocarbon are used for qualitative separation; a mixture of light petroleum-ethyl acetate-1N NH₃ (65: :35:1) is used for quantitative separation. Alkaloids eluted with a 1:2 mixture of benzene-chloroform are transferred to a 1% solution of tartaric acid and determined directly by ultraviolet spectroscopy. 4 Tables, 24 Western, 9 Czech references. (Manuscript received 2 Feb 66).

1/1

PROCHAZKA, V. (Praha-Hloubetin, U Elektry 8); KAVKA, F.; PRUCHA, M.;
PITRA, J.

Determination of ergometrine, ergometrinine, ergotamine and
ergotaminine in ergot. Cesk. farm. 14 no.4:154-158 My '65.
1. Vyzkumny ustav prirodnych leciv, Praha. Submitted December
15, 1964.

PROCHAZKA, Vladimir, inz.; FOSENBAUEROVA, Renata

Shape defects of porcelain flatware. Sklar a keramik 15 no.3:
84-86 Mr '65.

1. Research Worksite of the Karlovarsky porcelan National
Enterprise, Brezova.

PROCHAZKA, V.; KAVKA, F.; PRUCHA, M.; JIRAK, J.

Common method for determining ergometrine, ergometrinine, ergo-
gotamine and ergotaminine in solutions. Cesk. farm. 13 no. 15
493-496 B 1964.

PROCHAZKA, V.

Float and sink test of finest grained coal. Vysl ban vyzk
3:169-177 '64.

1. Institute of Mining, Czechoslovak Academy of Sciences,
Prague.

PROCHAZKOVA, V.; VIT.R.; SVACINA, J.

Comparison of the results of gamma encephalography and electro-
encephalography in intracranial expansive processes. Cesk. neurol.
27 no.3:172-175 My'64

1. Nuerologicke oddeleni UVN v Praze; vedouci :MUDr. F.Pleskot.

PROCHAZKA, V., inz.; BARVIR, V.

Revision of Czechoslovak Standard 38 5524/I on determining sulfur
in fuel gas. Paliva 43 no.4:124-126 Ap '63.

PROCHAZKA, V.

2

CZECHOSLOVAKIA

PROCHAZKA, V; CEKAN, Z; BATES, R. B.

1. Research Institute for Natural Drugs, Prague (for Prochazka and Cekan); 2. Department of Chemistry and Chemical Engineering, University of Illinois, Urbana, Illinois (for Bates)

Prague, Collection of Czechoslovak Chemical Communications, No 5, 1963, pp 1202-1210

"On Terpenes. CLI. Structure of Globicin, A Guaianolide from Matricaria globifera (Thunb.) Druce."

PROCHAZKA, V., inz.; SULC, V., inz.

Proposal of a quality standard for lighting gas. Paliva 41 no.11:
354-355 N '61.

PROCHAZKA, V., inz.; BASE, J.

The Kovotechna type experimental gas burners. Paliva 42 no.12:361-
363 D '62.

1. Ustav pro zyzkum paliv, Bechovice.

PROCHAZKA, Vl., inz.

Determination of tar and phenol water in raw and prerefined
fuel gas. Paliva 42 no.3:83-88 Mr '62.

PROCHAZKA, Václav, inz.

Examination of metal-ceramic friction materials based on iron.
Zpravy pras metal Sumperk no.4560-66 '62

1. Slovenska akademie ved - IAT, Kosice.

L 13247-65 EMP(e)/ENT(m)/EMP(t)/EMP(k)/EMP(b) PF-4 AFAL/AEDC(a)/SSD/EST(4)
ACCESSION NR: A14046756 Z/0000/64/000/000/0053/0066

AUTHOR: Prokazka, V. (Prokazka, V.) (Engineer, Candidate of sciences, Member of metallurgical technology laboratory)

TITLE: A contribution to the kinetics of the sintering process in the presence of a liquid phase

SOURCE: Medzinárodná konferencia o praskovej metalurgii. 1st, 1962. Problemy praskovej metalurgie; storník vedeckych prac (Problems in powder metallurgy: collection of scientific papers). Bratislava, Vyd-vo SAV, 1964, 53-66

TOPIC TAGS: sintering kinetics, copper lead system, diffusion, material transport, copper iron transport

..... a contribution to the sintering process of binary copper-lead system

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ACCESSION NR: AT4046756

first stage, the migration of copper ions is accelerated by the liquid phase, however, after the equilibrium has been attained, the migration of these is substantially retarded. Orig. art. has: 11 figures.

ASSOCIATION: Laboratorium hutnickej technologie VST, Kosice (Laboratory of Mining Technology)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IO

NO REF Sov: 001

OTHER: 016

PROCHAZKA, Vaclav, inz., C.Sc.

Examination of the surface tension of the system Cu-Pb. Hut
listy 17 no.8:562-569 Ag '62.

1. Ceskoslovenska akademie ved, Laboratorium hutnickej
technologie Slovenskej akademie vied, Kosice.

PROCHAZKA, V.

- (36)
- Prague, Collection of Czechoslovak Scientific Publications, Vol. 27,
No. 4, April 1952 (continued)
9. "Preparation Methods for Natural Products, Part II. Synthesis of
Organic and Inorganic Compounds," J. KALKA, J. PELIKAN, and V. PRO-
CHAZKA, Research Institute of Nature, Prague; pp. 32-60.
(Chemical articles).
 10. "Synthesization Experiments in the Group of Nucleophilic Additions for the Syn-
thesis of the Baccin 19-Substituted Analogs of Baccin and Baccin
Bisulfate," J. KALKA and L. SALLI, Research Institute of Pharmacy and Bioche-
mistry, Prague; pp. 36-45.
 11. "Synthesization Experiments in the Group of Nucleophilic Additions.
Part III. On the Synthesis of the Baccin 19-Substituted Analogs of
Baccin Bisulfate," J. KALKA and J. PELIKAN, Research Institute of
Pharmacy and Biochemistry, Prague; pp. 37-47.
 12. "Carbolic Derivatives of Isopropyl Urethane. I. Part I. Isolation of
the Carbolic Urethane," J. KALKA, J. MULÍK, O. BUDÍČEK, and
O. ŠTĚPÁK, Chemical Institute at the Royal Academy of Sciences,
Brno-Czechoslovakia; pp. 47-52.
 13. "On Protopine, Part I. X-Ray Structure of Protopine Determined by Produc-
tion of Crystalline Derivative," V. TONTOVÁ, J. MULÍK, J. PELIKAN,
and J. KALKA, of the Institute of Organic Chemistry and Biochemistry,
Prague; pp. 62-67. *(Chemical articles).*
 14. "Carbolic Derivatives of Aesculin and Saponin. I. Part II. The Structure
of Saponin and of its Derivatives," J. KALKA, S. ALBERT, O. BUDÍČEK,
and D. ŠTĚPÁK, of the Department of the Biotechnology of Saponins
and Saponins, Czechoslovak Institute of the Slovenská Akadémie of Sciences, Bratis-
lavá, pp. 68-70.
 15. "Thiobacilli Acid Components and Their Analogues. Part VIII. Synthesis
of Aromatic 9-(2-nicotinyl)-Urethane and of Their Nucleophilic
Derivatives," J. K. KALKA and J. PELIKAN, of the Institute of Organi-
c Chemistry and Biochemistry, Czechoslovak Academy of Sciences;
Prague; pp. 71-75. *(Chemical articles).*
 16. "Note on the Investigation of the Antileprosy Activity of
Antitubercular Drugs," J. KALKA, J. ALBERT, and F. ZEMSKÝ,
Institute of Dermatology, Charles University, Prague; pp. 76-81.
(Medical articles).
 17. "Synthesis of the Derivatives of Salvin Pyrone - Part I. I. Syn-
thesis of the Alkaloid Derivatives of Salvin Pyrone - Part I. I. Syn-

PROCHAZKA, V.

<p>Prague Collection of Czechoslovak Chemical Organizations, Vol. 27, No. 4, 1962. Copyright by the Publishing House of the Czechoslovak Academy of Sciences, 1962.</p>	
<p>1. "Polarography of Nonbenzoid Aromatic and Related Substances", Part VIII. Effect of Reaction Processes During the Electrocatalysis of the Polarographic Reduction of Benzene Derivatives. Part I. Effect of the Czechoslovak Academy of Sciences, Prague, and J. PELIKAN, Ph.D., Institute of Institute of Physicochemical Methods, at the Czechoslovak Academy of Sciences, Prague (original-language Institution names not given); pp 799-798 (English article).</p>	
<p>2. "Substitution of Ligands in Macrocycles. Part IV. Potentiometric Titration of Metallic Compounds", V. KALINA, et al., Institute of Inorganic Chemistry at Charles University, Prague; pp 799-801.</p>	
<p>3. "Substitution of Ligands in Macrocycles. Part V. Potentiometric Titration of Fe(II) of the Institute of Inorganic Chemistry at Charles University, Prague; pp 792-797.</p>	
<p>4. "On Protein Interactions. Part XXXI. A Study, by the Light Scattering and Intrinsic Interpretation Method, of the Effect of Conditions Upon the Association of Hemoglobin with Human Serum Albumin", P. KALOŠEK, P. KUDÝ, and B. ŠEMLÍČEK, Institute of Macromolecular Chemistry at the Czechoslovak Academy of Sciences, Prague; pp 799-800 (English article).</p>	
<p>5. "On Protein Interactions. Part XXXII. Preparation, by Free Sulphur Oxide, of Aggregates of Heat-denatured Human Serum Albumin", P. KALOŠEK, P. KUDÝ, and B. ŠEMLÍČEK, Institute of Macromolecular Chemistry at the Czechoslovak Academy of Sciences, Prague; pp 799-800 (English article).</p>	
<p>6. "A Study, with the Aid of the Extraction Method, of the Complexes of Iron(II) with Human Serum Albumin", J. ŠEMLÍČEK, and V. ALLEN, et al., Institute of Technology, Prague; Chemical and Nuclear Physics, Czech Institute of Technology, Prague; pp 809-815.</p>	
<p>7. "Concentratorgraphic Fractionation of Polyvinylchloride", J. PELIKAN and B. KUDÝ, Institute of Physical Chemistry at the Czechoslovak Academy of Sciences, Prague; pp 815-822.</p>	
<p>8. "Separation Methods for Natural Products. Part I. New Concentrator Distribution Procedure", J. PELIKAN and Z. ČERNÝ, Research Institute for Search Institutes for Natural Products, Prague; pp 823-831 (English article).</p>	

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26
279

CEKAN, Z.; PROCHAZKA, V.; HEROUT, V.; SORM, F.

Terpenes. CXV. Isolation of globicin, a guianolide from Matricaria globifera (Thunb.) Druce. Coll Cz chem 25 no.10:2553-2558 0 '60.
(EEAI 10:9)

1. Research Institute for Natural Drugs, Prague (for Cekan and Prochazka) 2. Department of Natural Products, Institute of Chemistry, Czechoslovak Academy of Science, Prague. (for Herout and Sorm)

(Terpenes) (Globicin) (Matricaria globifera)

PROCHAZKA, Vl., inz.; VOKOUN, M.; SMRTKOVA, M.

Draft of a Czechoslovak Standard on determining the tar
content in heating gases. Paliva 44 no. 7:228-230
Jl '64.

PROCHAZKA, Vl., inz.

Contribution to the introduction of chromatographic methods in
laboratories of coke and gas plants. Paliva 43 no.9:291-293
Sr'63.

Dermatology

CZECHOSLOVAKIA

UDC: 616.5-085.778[616.936]-085.361.453

PROCHAZKA, Vlastimil, MD; Dermatological Department, Central Military Hospital, Prague; commander, Col Jan LOCHOVSKY, MD

"Treatment of Dermatoses with Antimalarial Drugs in Combination with Prednisone"

Prague, Vojenske Zdravotnicke Listy, Vol 35, No 5, Oct 66, pp 223-225

Abstract: A review of the literature on the combined treatment of dermatoses with antimalarial drugs and Prednisone, and a report on 27 cases treated experimentally over a 30-month period. The combined method is recommended because of its minimum toxicity. It is proposed that the Bayer product Resochin be imported to replace the less effective Delagil from Hungary. Nine Western and six Soviet-bloc references.

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S/081/62/000/004/013/087
B149/B101

AUTHORS: Landa, Stanislav, Petru, Frantisek, Vit, Jaroslav,
Prochazka, Vladimir, Mostecky, Jiri

10

TITLE: The Chemistry of alkali metal hydrides. I. The production
of alkali metal hydrides

PERIODICAL: Referativnyj zhurnal. Khimiya, no. 4, 1962, 97, abstract
4V30 (Sb. Vysoké školy chem.-technol. Praze. Odd. Fak.
anorgan. a organ. technol. v. 2, 1958, 495-503)

15

TEXT: A method is described for the production of LiH, NaH and KH by the
action of H₂ on the metals in question under a pressure of about 120 atm,
at temperatures between the melting points of the metals and of the
hydrides, using MoS₂ and WS₂ as catalysts. [Abstracter's note: Complete
translation.]

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25

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Card 1/1

PROCZAKA, WLODZIMIERZ

"Trzcinobetonowa budowa doswiadczenia w Oliwie. Warszawa, Państwowe Wydawn. Techniczne, 1951. 16 p. (Warszaw. Instytut Techniki Budowlanej.) (Prace, nr. 123. Seria C: Materiały budowlane, żelazowe i ich technologia, nr. 39) (Experimental cane and concrete building construction in Oliva. illus.)"

SO: East European Accessions List, Vol 3, No 8, Aug 1954.

PROCHAZKA, Z.

"Helicopters in forestry." p. 467.

TECHNICKA PRACA. (Rada vedeckych technickych spolocnosti pri Slovenskej akademii vied). Bratislava, Czechoslovakia, Vol. 11, No. 6, June 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

PROCHAZKA, Z.

Activities of the Isotope Laboratory of the Research Institute of Veterinary
Medicine of the Czechoslovak Academy of Agricultural Sciences. p. 338.

VESTNIK. (Ceskoslovenska akademie zemedelskych ved.) Praha, Czechoslovakia,
Vol. 6, no. 6, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

KYRAL, V.; KOMRSKA, M.; PROCHAZKA, Z.; ZOUBEK, R.

Experiences with clinical electromyography of the oculomotor muscles. Česk. oftal. 19 no.6:383-388 N°63.

1. Neurologicka klinika lekarske fakulty KU v Hradci Kralove (prednosta prof. dr. M.Sercl, DrSc.) a Očni klinika lekarske fakulty KU v Hradci Kralove (prednosta prof. dr. M.Klima).

*

PROCHAZKA, Z.

On the bound form of ascorbic acid. Pt.18. Coll Cz Chem
28 no: 2:544-546 F '63.

1. Institute of Organic Chemistry and Biochemistry,
Czechoslovak Academy of Sciences, Prague.

CZECHOSLOVAKIA

V. FROCHAZKOVA and L. SELIK, Department of Neurology (Neurologické oddelení) Head (vedoucí) F. PLESKOT, MD, Central Military Hospital (Ustředna Vojenska Nemocnice) Prague.

"Significance of Bemegride Activation of EEG Tracings in Epileptics."

Prague, Ceskoslovenska Neurologie, Vol 26(59), No 3, May 63; pp 165-168.

Abstract [English summary modified]: Studies in 150 men including 40 non-epileptic controls, injecting up to 30 ml. of 5% solution slowly, watching EEG to interrupt as any abnormal waves appeared. Generally there were both false negatives and false positives but latter tended to occur mainly at high doses. True epileptics responded positively in most instances; among non-epileptics encephalic syncope, facial paresis, anuresis responded more frequently than other diseases.
Graph; 1 Czech and 10 Western references.

1/1

CZECHOSLOVAKIA

J. SVERAK, J. JURAN, Z. PROCHAZKA and S. NETTL, Eye Clinic (Ocni klinika)
Head (prednosta) Prof Dr M. KLIMA, and Neurology Clinic (Neurologicka
klinika) Head Prof Dr M. SERCI, DrSc, Medical Faculty, Charles University
(Lekarske fakulta Karlove University) Hradec Kralove.

"Some Special Problems in Ophthalmoneurologic Diagnosis."

Prague, Ceskoslovenska Neurologie, Vol 26(59), No 3, May 63; pp 261-269.

Abstract [English summary modified]: Detailed discussion of papilledema,
choked disc, optic neuritis and pseudoneuritis which author saw in 8
young myopic patients with treatment-refractory headaches as only
symptoms. Precise diagnosis and prognosis may require not only photo-
graphic comparison of papillae at different times, but also microscopy
and examination of parents and siblings. Four photographs, graph, 10
Czech and 44 Western references.

1/1

PROCHAZKA, Z., ins.

Counterflow operation of ion exchanges. Bul EGU no. 5/6:43-48 '62.

CA

Potassium permanganate as a nonspecific detection
reagent in paper chromatography. Z. Procházka, *Chem.
Listy* 44, 43(1950).--Paper chromatograms of org. compds.
can be developed with 0.03-0.15 N KMnO₄ acidified with
0.00-0.3 N H₂SO₄. White or light yellow spots reveal the
presence of org. compds. M. Hudlický

Chem A&C
1931

Treatment of paper for paper chromatography. Z.
Lyscháka. Chem. Listy 44, 154-5(1950).—Both filter
paper and ordinary writing paper gave better results and
quicker movement of the front after digestion with 8-24%
HCl. Et bis-(4-hydroxycoumaryl-3)-acetate and glycine
were used as test substances. M. Hudlický.

CA

Simple device for paper chromatography. K. Fučík
and Z. Procházka, *Chem. Listy* 44, 165(1950).—An
Erlenmeyer flask and a test tube are used for paper chro-
matography. The strip of paper hangs from the stopper.
One phase is placed in the vessel, the other soaked in ad-
sorbent cotton or filter paper and fastened to the stopper.
M. Hudlický

CA

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A proof of the existence of a bound form of ascorbic acid in cabbage by paper chromatography. Z. Procházká and S. Kofránek (Czech. Chem. Works, Prague). *Collection Czech. Chem. Commun.* 16, 65-8 (1951) (in English).—A concentrate of the bound form of ascorbic acid was prepd. by Sumnayov's method (*C.A.* 44, 6966) and was chromatographed on paper together with a hydrolysed sample and a control. Strips of paper 8 cm. wide were used; the 3 soins. were applied with a micropipet 6-7 cm. from the top of the strip with 2 cm. spacings and developed with several solvents. It was demonstrated with color reagents that ascorbic acid was liberated from the bound form by a brief acid hydrolysis. The R_f values detd. for pure ascorbic acid were: PrOH 0.10, EtOH 0.04-0.02, MeOH 0.20-0.30, 50% MeOH 0.85, water 0.98, concd. HCl 0.9, AcOH 0.35-0.55, HCO_2H 0.85, BuOH:AcOH:water (4:1:5) 0.34-0.45. Tillman's reagent (0.008-0.001 N dichloroindophenol) was the most specific detecting reagent; it gave the sharpest contrasts and these remained after drying. A concentrate prepd. from 1680 g. of cabbage contained 7-13 mg. of ascorbic acid in the bound form. W. M. Potts

C1

Anticoagulant substances. VIII. Nitrogen analogs of dicumarol and related substances. K. Pučík, Z. Procházková, V. Hach, and J. Štrol (United Pharm. Works, Prague, Czech.). *Chem. Listy* 45, 21-4 (1951); cf. *C.A.* 45, 6088; 97306. — CH_3O (with 4-hydroxycarbonyl) (I) give 3,3'-methylidenebis(4-hydroxycarbonyl) (II). I and OHCCO_2H (IV) give bis(4-hydroxy-3-carboxyphenyl)acetic acid (III). IV and 2,4-dihydroxyphenylhydrazine (V) yield 3,3'-methylidenebis(2,4-dihydroxyphenylhydrazine) (VI). Prepn. of II: 25 g. I in 750 ml. boiling HCl diln. 2:3 was filtered with Norit and the filtrate treated with 100 ml. 38% soln. of CH_3O ; the yellowish product (21.5 g.), crystd. from PhCH_2OH , does not melt below 400°. The condensation may be carried out in PhCH_2OH , EtOH , or AcOH with CH_3O or paraformaldehyde. I (17 g.) in 250 ml. boiling HCl diln. 2:3 was treated with 40 ml. 11% aq. soln. of IV and boiled 7 hrs., giving 15 g. of a reddish product, m. above 400°; pyridine salt, decomp. above 460° (from $\text{C}_6\text{H}_5\text{N}$). III refluxed with excess alc. soln. with HCl gave Me, Et, and Pr esters, m. above 400°. III and CH_3N_2 in Et_2O gave a compd. m. 240° (from MeCO), contg. 3 MeO groups. V (4 g.) in 400 ml. diln. HCl boiled 1 hr. with 25 ml. 38% CH_3O gave VI. M. Hudlický

*C. a.**1951**Fingerprints
10*

Synthesis of a derivative of Isothiourea. Z. Procházka, R. Tichý, and Z. Svoboda (United Pharm. Works, Prague, Czech.). *Chem. Listy* 45, 42-3(1951).— $\text{CH}_2\text{CHCH(OH)}_2$ (I) with 2 moles $\text{CS}(\text{NH}_2)_2$ (II) gives 2-(2-amino-5-thiazolyl)-2-thiopseudourine (III), identical with the product of the reaction between II and 2-amino-5-chlorothiazole (IV). II (40 g.) in 80 ml. HCl boiled 2-3 hrs. with 40.2 g. I gave 22.2 g. III.2HCl; III, m. 210° (decompn.) (from concd. HCl); IV (1.5 g.), 0.84 g. II, and 1.5 ml. concd. HCl boiled 1 hr. yielded 1 g. III.2HCl. M. Hudlický

PROCHÁZKA, ŽELIMÍR

CZECH

Bound form of ascorbic acid. I. The use of paper chromatography for the specific determination of ascorbic acid. Stanislav Kofistek and Želimir Procházka (United Pharm. Works, Prague). *Chem.-Listy* 45, 372-4 (1951); cf. *C.A.* 46, 4171g.—The detection of ascorbic acid with dichlorophenol-indophenol was made more specific by applying the reaction to a paper chromatogram, where ascorbic acid is characterized together with its *R*. II. Prod of existence of ascorbigene in cabbage by paper chromatography. Želimir Procházka and Stanislav Kofistek. *Ibid.* 274-5.—Ascorbigene contained in cabbage was identified with dichlorophenol-indophenol as ascorbic acid on a paper chromatogram, after hydrolysis with HCl of the canned, ext. of cabbage.

Nicholas Feldman

NY 64

CP 19

Bound form of ascorbic acid. III. A study of some properties of ascorbigene by means of paper chromatography. Želimir Procházka and Stanislav Kofřítek (Pharm. Biochem. Research Inst., Prague, Czech.). *Chem. Listy* 45, 415-19 (1951).—Aq. ext. of fresh cabbage was treated with activated charcoal which was then extd. with a mixt. of $\text{CHCl}_3\text{-BuOH}$ (7:3). The ext. was evapd., the residue extd. with water, centrifuged, and evapd. *in vacuo* below 40°. Ascorbigene contained in the ext. was identified on a paper chromatogram after hydrolysis with HCl as ascorbic acid (by means of I₂-starch reagent). Paper chromatography was carried out mostly in the system $\text{BuOH-AcOH-H}_2\text{O}$ and in H_2O . Ascorbic acid in ascorbigene was detd. semiquantitatively by comparing the weight of stains on the chromatogram with that of a standard soln. of ascorbic acid.

M. Hudlický

CA

*Pharmaceuticals Cosmetics
Perfumes '7*

✓ **Barbiturates.** Z. Procházká (Central Chem. Inst., Prague). Czechoslov. Farm. 1, 309-400 (1952). —A review with 5 references.
Dagmar Hubíková

PROCHAZKA, Z.

Studies on anticoagulants; pelantan metabolites in human and
rabbit urine. Cesk farm. 1 no. 11-12:637-646 1952. (CLML 24:1)

1. Of the Research Institute of Pharmacy and Biochemistry, Prague.

Conductors

*S.B.
Sect B*

621.315.448.3
1972. Graphical method of calculation of the
principal dimensions of concrete footings for lattice
towers of transmission lines. Z. PAVELKA
Eletroprojekt, Obrz., 41, 172-8 (No. 4; 1952) in Czech.
A graphical method is developed by means of

which the main dimensions of square and rectangular
concrete footings can be determined taking into
account the permissible loadings of the ground. A
practical example is given.

PROCHAZKA, Z.; SANDA, V.; MACEK, K.

Paper chromatography of indole derivatives. In German. Coll.Cz.Chem.
24 no.9;2928-2938 S '59. (EPAI 9:5)

1. Abteilung fur Naturstoffe, Chemisches Institut, Tschechoslowakische
Akademie der Wissenschaften, Prag. Forschungsinstitut fur Pharmazie
und Biochemie, Prag.
(Chromatography) (Indole)

PROCHAZKA, Z.; SANDA, V.; JIROUSEK, L.

Isothiocyanates in savoy and Brussels sprouts. In German. Coll.Cz.Chem.
24 no.11:3606-3610 N '59. (EAI 9:5)

1. Chemisches Institut, Tschechoslowakische Akademie der Wissenschaften,
Prag und Forschungsinstitut fur Endokrinologie, Prag.
(Isothiocyanates) (Savoy) (Brussels sprouts)

COUNTRY	:	CZECHOSLOVAKIA
CATEGORY	:	Physical Chemistry. Surface Phenomena. Adsorption. Chromatography. Ion Exchange
ABS. JOUR.	:	RZKhim., No. 1 1960, No. 631
AUTHOR	:	Sanda, V.; Prochazka, Z.; Le Moal, H.
JNST.	:	-
TITLE	:	Interrelation Between the Structure and Values of R_f in the Series of Aliphatic Dicarboxylic Acids
ORIG. PUB.	:	Collect. Czechosl. Chem. Commun., 1959, 24, No 2, 420-427
ABSTRACT	:	No abstract. See RZKhim., No 18, 1959, No 63875.

CARD:

1/1

PROCHAZKA, Z.

PROCHAZKA, Z.; TICHY, R.

Studies on anticoagulants. XIX. Hydrolytic degradation of the ethylester of
di-(4-hydroxycoumarinyl-3)-acetic acid(pelentan). XX. Derivatives of
-(4-hydroxycoumarinyl-3)- -(2-hydroxybenzoyl)-propionic acid. p. 743.
(Chemicke Listy. Praha. Vol. 46, No. 12, Dec. 1952)

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 6,
June 1955, Uncl.

PROCHAZKA, Z.

overhead

Paper chromatography of ascorbic acid and related substances. L. Procházka (Chem. Inst. Czech. Acad. Sci., Prague). Českoslov. farm. 2, 17-22(1963).—A review with 23 references. D. Hubíková

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Biological Chemistry

H
11-23-54

PROCHAZKA, Z.; RIHOVA-CECHOVA, V.

Effect of certain K and anti-K vitamin active substances upon the
germination of wheat. Chekh.biol.2 no.2:117-120 Ap '53. (MIRA 7:2)
(Vitamins) (Wheat)

PROCHAZKA, Z.

ZUMAN, P.; PROCHAZKA, Z.

Combined form of ascorbic acid. Part 4. Polarographic determination of ascorbic acid in ascorbigen concentrates [with summary in German].
Sbor.Chekh.khim.rab. 18 no.4:442-449 Ag '53. (MIRA 7:6)

1. TSentral'nyy polyarograficheskiy institut i TSentral'nyy khimicheskiiy institut, Praga. (Vitamins) (Polarograph and polarography)

PROCHAZKA 2 ELIM

Anticoagulants. XXII. Preparation of 3-(substituted aminomethyl)-4-hydroxycoumarin derivatives by the Mannich method. Zdeněk Procházka (Biochem. Pharm. Research Inst., Prague, Czechoslovakia). *Chem. Listy* 47, 59-62 (1953); cf. *C.A.* 47, 5029c. — 3-Alkylaminomethyl- and 3-dialkylaminomethyl-4-hydroxycoumarins were prepd. by refluxing 1 hr. 0.11 mole amine in 100-150 ml. EtOH, to which were added 10.2 g. (0.1 mole) 4-hydroxycoumarin (I) and, at 14-20°, with cooling, 10.9 g. 34% aq. CH₃O. The products crystd. on standing at room temp., or after evapn. or diln. with ether. 3-Substituent, yields, and m.p.s. of the 3-alkylaminomethyl-4-hydroxycoumarins are given as follows:

piperidinomethyl	78, [80-92°]
PhCH ₂ NHCH ₃	32, 159-1°
CH ₃ NHCH ₃	74, 175-7°
Me ₂ NCH ₂	69, 190-1°

With Et₂NH, no corresponding Mannich base was obtained, and only dicoumarol [3,3'-methylenebis(4-hydroxycoumarin)], m. 283°, was isolated in yields ranging from 8.4 g. to 9.2 g. (from 0.1 mole I) according to exptl. conditions.

M. Hudlický

PROCHAZKA, Z.

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Pharmaceuticals, Cosmetics, Perfumes

Bound form of ascorbic acid. IV. Polarographic determination of ascorbic acid in cabbage concentrate.
Petr Zeman and Želimír Procházka (Ústřední ústav polárografie, Praha, Czech). Česk. Čím. Listy 47, 367-62 (1953);
cf. C.A. 48, 4171g.—Combined ascorbic acid content in cabbage concentrates was detd. polarographically after the hydrolysis with 1% H_2SO_4 , in the absence of air. To a cabbage concentrate (18 ml.) is added 2 ml. 10% H_2SO_4 , a stream of N or CO_2 is passed through the soin, immersed for 8 min. in a 100° bath, the soin is cooled, filled to the mark, and a 0.5-1 ml. aliquot is polarographed in 4 ml. M acetate buffer pH 4.9. The results are checked by potentiometric and visual methods. M. Hudlický

6/8/54
B.W.

PROCHAZKA, Z.

"On Steriods. VIII Paper Chromatography of Steroid Acids" p. 718, (CHEMICKE LISTY, Vol. 47, no. 5, May 1953, Praha, Czechoslovakia).

SO: Monthly List of East European Accessions, LC, Vol. 2, No. 11, Nov. 1953, Uncl.

PROCHÁZKA, Z.

Studies on anticoagulants. XXV. Infrared spectra of some derivatives of 4-hydroxycoumarin and chromone. Eduard Knobloch and Zdeněk Procházka (Farm. biokém. výzkumný ústav, Prague, Czechoslovakia). Chem. Listy 47, 1235-92 (1953); cf. C.A. 48, 311d. Infrared spectra of 4-hydroxy-coumarin, 4-methoxycoumarin, Et bis(4-hydroxy-3-coumarinyl)acetate (*Pudentan*) (I), Et bis(4-methoxy-3-coumarinyl)acetate, 3,3'-methylene-bis(4-hydroxycoumarin) (dicoumarol) (II), 3,3'-methylidenebis(4-hydroxycoumarin), Et (3-chromonyl)(4-hydroxy-3-coumarinyl)acetate, its mono-Me ether, and of coumarin and chromone are given. In the equil. between I and Et bis(2-hydroxy-3-chromonyl)acetate (III) and between II and 3,3'-methylenecis(2-hydroxy-chromone) (IV), III and IV are favored. All derivs. with prevailing chromone structure are active anticoagulants.
M. Hudlický

Chemical Abst.
Vol. 48
Apr. 10, 1954
Biological Chemistry

Combined ascorbic acid. V. The characterization of ascorbigen from cabbage by paper chromatography. Zdeněk Procházka (Čech. Akad. Věd, Prague, Czech.) *Chem. Listy* 47: 1637-42 (1953).— R_f values of ascorbigen are given for 20 solvent systems, and color tests of ascorbigen with various reagents are described. Chromatography of a cabbage concentrate on a cellulose column using mixt Et₂O as eluent raised combined ascorbic acid content from 2.6% to 31%. Hydrolysis of the concentrate with HCl (1:1) 24 hrs. at 100° gave a dark-violet ppt. (43%). It was found that absorption max. of ascorbic acid in ultraviolet waves is suppressed in ascorbigen, and that the ascorbic acid is probably bound to a compd of phenol or indole nature. It is not combined with protein, peptide, amino acid, flavonoid, or a sugar. The mol. wt. of the ascorbic acid carriers lies between 307 and 565. VI. The chemical nature of ascorbigen. *Ibid.* 1643-8.—During the chromatography of crude ascorbigen on cellulose 2 compds containing combined ascorbic acid were isolated. One had R_f in the system Et₂O-H₂O 0.08, (ascorbigen A); the other 0.74 (ascorbigen B). Both contained N and probably an indole ring, proved by color tests. M. Shultz

PROCHÁZKA, Z.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Analytical Chemistry

Identification of 2,4-dinitrophenylhydrazones of carbonyl compounds by paper chromatography. V. Šírová and Z. Procházka (Czech. Akad. Věd, Praha, Czech.). Chem. Listy 48, 1074-6 (1954). To identify carbonyl compds., the 2,4-dinitrophenylhydrazones are subjected to paper chromatography with petroleum as the stationary phase and 80% EtOH or 65% PrOH as the mobile phase. The R_f value for the dinitrophenylhydrazones of the carbonyl compds. in EtOH and PrOH are given: CH₃O 0.8, 0.84; AcOH 0.66, -; Me₂CO 0.42, -; iso-PrCHO 0.32, -; MeEtCO 0.31, 0.70; cyclopentanone 0.29, 0.67; cyclohexanone, 0.23; 2,2-dimethylcyclohexanone, 0.15, -; carvomenthone, 0.13, 0.49, resp. M. Hudlický

PROCHASKA, Zelimir

Studies on anticoagulants. 26. New method of 3-(o-hydroxybenzoyl ethyl)-4-hydroxycoumarin. Cesk. farm. 3 no.6:221-222 Je '54.

1. Z Ustavu organické chemie Československé akademie věd, Praha.
(COUMARIN derivatives,
*3-(o-hydroxybenzoyl ethyl)-4-hydroxycoumarin, synthesis)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343110015-2

Práce
Ascorbigen (boční vitamín C). Zdeněk Procházka
(Českoslov. akad. věd, Prague). Review on history, oc-
urrence, analytical methods, physiology, biochemistry,
and dietetics. L. J. Urbánek

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343110015-2"

PROCHAZKA, Z.

Steroids. Part 8. Paper partition chromatography of steroid acids
[in Russian with summary in English]. Sbor.Chekh.khim.rab. 19 no.1:
98-106 P '54. (MLRA 7:6)

1. Department of Natural Products, Institute of Organic Chemistry,
Czechoslovak Academy of Science, Prague. (Steroids) (Chromatographic
analysis)

PROCHAZKA, Z.

"Combined Ascorbic Acid. VI. Chemical Nature of Ascorbigen." p. 581,
(COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SLOVNIK CHEMKHOSLOVATSKIH
KHMICHESKIKH RABOT, Vol. 19, No. 3, June 1954, Praha, Czechoslovakia)

SG: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

PRAHA, CZECHOSLOVAKIA.

PRONAYI, Z.; KNOBLOCK, E.

Studies on anticoagulants. XXV. Infrared spectra of certain derivatives of 4-hydroxycoumarin and chromone. p. 774. (Collection of Czechoslovak Chemical Communication. Praha. Vol. 19, No. 4, Aug. 1954)
culation. Praha. Vol. 19, No. 4, Aug. 1954)
30: Monthly List of European Accession (EAL), IC, Vol. 4, No. 6,
June 1954, Mel.

Combined ascorbic acid. VII. Ascorbigen content in certain vegetables. Želimir Procházká and Vlastimil Šanda (Česk. akad. věd, Mat. a přírodn. Listy 48, 898-901 (1964); cf. C.A. 48, 4023f).—Seventeen vegetables have been investigated as to the (hydroxy-type) ascorbigen content by titration with 2,6-dichloroindophenol and by paper chromatography. By the 2nd method, only the following forms of *Brassica oleracea* gave pos. tests: var. *capitata* f. *rubra* and f. *alba*; var. *oleracea* f. *sugartii*; var. *botrytis* subvar. *cymosa* and subvar. *canaliculata*; var. *conyzoides* f. *alboviridis*; and var. *gemmifera*. M. Hudlický

FROCHÁZKA, Z.

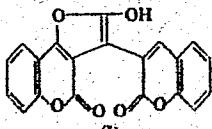
CZECH

✓ 2520. Steroids. XIII. Paper chromatography of steroid amines. Z. Frocházka, L. Labler and Z. Kotásek (Chem. Listy, 1954, 48 [7], 1088-1070).
The paper chromatography of a number of lipophilic steroid amines is described. Amines containing one nitrogen atom were separated by means of moist butyl acetate or the solvent system light petroleum (as stationary phase) - aq. ethanol. The separation of the steroid alkaloids from the bark of *Holarhena antidyserterica* was effected by the systems pentanol - acetic acid - water (top layer) or water-saturated, weakly acid *sec*-butanol on paper impregnated with KCl, or, best, light petroleum - aq. alkaline ethanol. The spots were detected by iodine vapour or the Kraut-Dragendorff reagent.
G. GLASER

✓ 42

Pecháčka, Želimir

Coumarin derivative. Karel Fučík and Želimir Pecháčka, Czech. 85,251, Dec. 1, 1966. Treatment of bis(4-hydroxy-3-coumarinyl)acetic acid with dehydrating agents (e.g. POCl_3 or SOCl_2) preferably in CCl_4 yields a chloride which on cleavage of HCl gives I.



L. J. Urbánek

PROCHAZKA, ZELIMIR

✓ Esters of bis(4-hydroxycoumarin-3-yl)acetic acid. Karel
Putík and Zelimir Procházka, Czech. 85,301, Dec. 1,
1955. Treatment of the anhydride product of bis(4-
hydroxycoumarin-3-yl)acetic acid (cf. Czech. 85,251) with
compds. contg. 1 or more HO groups yields esters which are
anti coagulants for blood (ester radical and m.p.): Me, 203-
8°; Et, 176°; Pr, 143-4°; Bu, 154-5°; n-hexyl, 121-2°;
n-heptyl, 123-8°; n-octyl, 108-9°; ethylene, 122-7°; propyl-
ene, 183°; benzyl, 185-6°; $C_6H_5CH_2$, m. 194°.
L. J. Urbánsk

Chem

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PRoCHÁZKA, ZELIMÍR

✓ Coumarin derivatives showing biological activity. Želimir Procházka. Czech. 85,358, Dec. 1, 1958. 3-Aminomethyl-4-hydroxycoumarin (I) with certain ketones yields compds. lowering the level of prothrombin in blood and showing raticidal effect. 3-(*o*-Hydroxybenzoyl)ethyl-4-hydroxycoumarin prep'd. in 44% yield by heating 5 g. I with 8 ml. *o*-HOC₆H₄Ac to 160-70°, crystals from AcOH-MeCO, m. 193-5°. Similarly were prep'd. 3-benzoylchyl-4-hydroxycoumarin, m. 155°; 3-(2-oxocyclohexylmethyl)-4-hydroxycoumarin, m. 192°; 3-chromonyl(4-hydroxy-3-coumarinyl)methane; and 3-(2-benzoylpropyl)-4-hydroxycoumarin.

L. J. Urbánek

PROCHÁZKA, ZELMIK

Esters of 2-(4-hydroxy-3-coumarinyl)-3-salicyloylpropionic acid, with high hypoprothrombinemic activity. Želimir Procházka. Czech. 85,004, Oct. 20, 1955. Decompn. of bis(4-hydroxy-3-coumarinyl)acetic acid (I) by alkali, which includes hydrolysis and decarboxylation, gives 2-(4-hydroxy-3-coumarinyl)-3-salicyloylpropionic acid (II) which is then esterified, yielding esters showing high biol. activity and a safe clinical use because of a very fast excretion from the organism. I (30 g.) in 300 ml. 10% aq. NaOH refluxed 8-10 hrs. and slowly poured into 11.5% HCl yielded 20.5 g. crude II, m. 165-73°. The II recrystd. from acetone and refluxed with a 5-fold vol. of 10% H₂SO₄ in MeOH gave 20 g. Me ester, m. 176°. In the same way was obtained 70% Et ester, m. 133-6°. L. J. Urbánek

PROCHAZKA, ZELIMIR.

SANDA, Vlastimil; PROCHAZKA, Zelimir.

Bound form of ascorbic acid, VIII.; determination of the bound form
of ascorbic acid-ascorbigen. Česk. farm. 4 no.2:63-64 Mar 55.

1. Z výskumného ústavu potravinářské technologie, Praha, a z ústavu
organické chemie, Česk. Akad. Ved, Praha.
(VITAMIN C, determination
bound)

FUCIK, K.; HAIS, I. M.; KAKAC, B.; KNOBLOCH, E.; PROCHAZKA, Z.

Chemical characterization of the main metabolic product of the anticoagulant drug, pelantan, in human urine. Chekh. fiziol.
4 no.3:308-315 1955.

1. Research Institute for Pharmacy and Biochemistry, Prague.
(COUMARIN, derivatives,
ethyl biscoumacetate decomposition prod. in urine)
(URINE,
ethyl biscoumacetate decomposition prod.)

FUCIK, K.; HAIS, I. M.; KAKAC, V.; KNOBLOCH, E.; PROCHAZKA, Z.

Chemical characteristics of the main product of anticoagulant
pelentan in human urine. Cesk. fysiol. 4 no.3:342-348 1955.

1. Vyzkumny ustav pro farmacie a biochemii, Praha.
(COUMARIN, derivatives,
ethyl biscoumacetate, metab. products in urine,
determ.)
(URINE,
ethyl biscoumacetate metab. products, determ.)

PROCHAZKA, Zelimir; TRCKA, Vaclav

Studies on anticoagulants, XXVIII.; a new highly active coagulant analogue palentan. Cesk. farm. 4 no.4:169-172 May 55..

1. Z Vyzkumneho ustavu pro farmacii a biochemii v Praze.
(COUMARIN, derivatives
ethyl biscoumacetate, anticoagulant activity)

PROCHAZKA, Z.

Ten-years research of coumarin anticoagulants in Czechoslovakia. Z. Prochazka (Ustav org. chem. CSAV, Prague). Českoslov. farm., 5, 165-70 (1956). —A review dealing with the synthesis of pelatran and many of its structural analogs, with physicochem. studies, metabolic studies, and studies concerning the relation between structure and pharmacologic effect done in Czechoslovakia since the discovery of pelatran in 1944. 68 references. K. Macek

PROCHAZKA, Z

Isolation of pure ascorbigen (Preliminary communication).
Z. Procházka, V. Sanda, and F. Šemrl (Csl. akad. věd.
Prague). *Chem. Listy* 50, 107 (1956). From culture
concentrates (cf. C.A. 48, 4033f), a compd. was obtained
by paper chromatography, countercurrent extrn., or frac-
tional crystn. having the formula $C_{11}H_{15}NO_3$, m. 86-9°;
picrate, m. 129-30°. Reduction of this compd., ascorbigen
(1), with LiAlH₄ gave small amt. of β -indolylactic acid, and
 β -indolylpropane-1,2-diol; alk. hydrolysis gave a small amt.
of β -indolylacetic acid. A partial formula is proposed for 1.
M. Hudlický

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Prochazka, Z.

Determination of elementary sulfur by paper chromatography. A. Vakubová and Z. Prochazka (Czech. Acad. Sci., Prague). Chem. Listy 50, 2020-31 (1956). — A quant. method of detg. S in CCl₄ exts. of tumorous tissue on paper impregnated with mixt. of kerosine and lignine (3:7) is described. Chromatograms are developed with 90% EtOH.

4
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PROCHAZKA, Z.

"Selection of solvents for paper chromatography.

p. 736 (Chemie, Vol. 9, no. 5, Nov. 1957)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958

PROCHAZKA, Z. : SANDA, V.: SORM, F.

"Isolation of pure ascorbigen. In Russian."

p. 333 (COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SBORNIK
CHECKSHOSOLVATSKIKH KHMICHESKIKH RABOT. -- Praha, Czechoslovakia.)
Vol. 22, No. 1 Feb. 1957

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1958

PRECHAZKA, Z.; SANDA, V.; S. M., F.

"On the structure of ascorbigen; preliminary communication." In English.

P. 654. Collection of Czechoslovak Chemical Communications, Sbornik Czechoslovatskikh Khimicheskikh Rabot. (Praga, Czechoslovakia) Vol. 22, no. 2, Apr. 1957.

SG: Monthly Index of East European Accession (EEAI) LC, Vol. ?, No. 5, May 1958

PROCHAZKA, Z

CZECHOSLOVAKIA/Organic Chemistry. Naturally Occurring
Substances and their Synthetic Analogs.

G-3

Abs Jour: Referat Zhur-Khimika, No 4, 1958, 11431.

Author : Kucera, J., Prochazka, Z., and Veres, K.

Inst :

Title : On Steroids. XXVI. Paper Chromatography of Neutral
Steroid Substances.

Orig Pub: Chem. Listy, 51, No 1, 97-102 (1957) (in Czech);
Sbornik Chekhslov Khim Rabot, 22, No 4, 1185-1191
(1957) (in German with a Russian summary)

Abstract: The chromatographic method used in the separation
of acid and basic steroid substances described in pre-
vious communications (see RZhKhim, 1954, 12787; 1955, 31727)
has also been found suitable for the separation of neutral
steroid substances by paper chromatography. The authors

Card : 1/3

CZECHOSLOVAKIA/Organic Chemistry. Naturally Occurring
Substances and their Synthetic Analogs.

G-3

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11431.

have made use of the countercurrent principle in the separation. Kerosene is used as the stationary phase. Inasmuch as the mobile phase is very sparingly soluble in the stationary phase, the systems used are characterized by great resolving power. In addition, the values of R_f can be varied over wide limits by appropriate changes in the composition of both the mobile and the stationary phases. Five different solvent systems are described in the paper together with their application to the separation of 30 neutral steroid substances. The sensitivity in the detection of Δ^5 -steroids in the presence of $SbCl_3$ can be increased by the addition of 10-20% $SOCl_2$ to a

Card : 2/3

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CZECHOSLOVAKIA/Organic Chemistry. Naturally Occurring
Substances and their Synthetic Analogs.

G-3

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11431.

saturated solution of $SbCl_3$ in $CHCl_3$ (sensitivity 3-5%).
5,6-dibromo steroid derivatives can be easily detected
by $AgNO_3$, exposure to light, and development in normal
photographic developers. The authors used spraying
with eriochromocyanine for contrast in the detection
of strongly lipophilic substances (cholestane, Δ^5 -
cholestene). For Communication XXV see RZhKhim, 1957,
44672.

Card : 3/3

PROCHAZKA, Z. ; SANDA, V. ; SORM, F.

"The structure of ascorbigen; a preliminary communication."

p. 1190 (Chemicke Listy, Vol. 51, no. 6, June 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6 June 1958.

PROCHAZKA, Z.

"E. Knobloch's Fysikalne chemicke metody stanoveni vitaminu (Physical-Chemical Methods for Vitamin Determination); a book review."

p. 1563 (Chemicke Listy, Vol. 51, no. 8, Aug. 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6 June 1958

~~BROCHÁZKA~~ PROCHÁZKA, Zelimir

Distr: 4E2c(j)

2 May

/ Relations of structure of R_f value of aliphatic dicarboxylic acids / Vlastimil Šanda, Zelimir Procházka, and Henry Le Moal (Českoslov. akad. věd, Prague). Chem. listy 52,

1046-52 (1958). — R_f values are given on Whatman Paper No. 4 in BuOAc satd. with H₂O and in CCl₄ with 2% AcOH for the following acids: oxalic 0.18*, —; malonic 0.25*, —; succinic 0.31, 0.02; glutaric 0.48, 0.03; adipic 0.63, 0.09; pimelic 0.77, 0.24; suberic 0.84, 0.42; azelaic 0.90, 0.09; sebacic 0.93, 0.80; methylmalonic 0.60*, 0.03; ethylmalonic 0.72*, 0.05; methylsuccinic 0.55, 0.09; α -methylglutaric 0.71, 0.11; β -methylglutaric 0.70, 0.10; α,ω -dimethylsuccinic 0.73, 0.12; propylmalonic 0.89*, 0.11; α -methyl- α -ethylsuccinic 0.84, 0.37; α,α -dimethylglutaric 0.84, 0.40; β,β -dimethylglutaric 0.83, 0.33; diethylmalonic 0.90*, 0.34; butylmalonic 0.90*, 0.31; β,β -dimethyladipic 0.84, 0.42; α,α -dimethyladipic 0.89, 0.54; α,α -diethylsuccinic 0.87, 0.54; dipropylmalonic 0.95*, 0.68; β,β -dimethylsuberic 0.94, 0.80; α,α' -dimethylsuberic front, 0.83; isoamylethylmalonic front*, front; HO₂C(CH₂)₅CO₂Me — 0.68; HO₂C(CH₂)₆CO₂Me —, 0.80; HO₂C(CH₂)₇CO₂Me —, 0.86; maleic 0.26 (0.34*), —; fumaric 0.59 (0.34*), —; citraconic 0.11 (0.44*), —; mesaconic 0.73 (0.80*), —; itaconic 0.43 (0.49*), —; glutaconic 0.52 (0.54*), —; muconic 0.67 (0.75*), —; α -1,2-cyclohexanedicarboxylic 0.81 (0.38*), —; *trans*-1,2-cyclohexanedicarboxylic 0.77 (0.31*), —; glyoxylic 0.06 (0.02*), —; glycolic 0.11 (0.13*), —; pyruvic double spot, —; lactic 0.24 (0.24*), —; tartaric 0.01 (0.01*), —; malic 0.04 (0.06*), —; levulinic 0.68 (0.55*), —; further R_f values for series of semesters of the type RR'C(COR'')CH₂CO₂R''' are given in CCl₄ with 2% AcOH; R = R' = R'' = Me; R''' = H 0.70; R = R' = R''' = Me, R'' = H 0.78; R = R'' = Me, R'

Vlastimil Šanda, Želimir Procházka, Henry Le Moal
JB = Et, R''' = H 0.81; R = R''' = Me, R' = Et, R''' =
H 0.88; R'' = Me, R = R' = Et, R''' = H 0.89; R''' =
Me, R = R' = Et, R'' = H 0.00. Values marked with an
asterisk were obtained on paper impregnated with H_2SO_4 .
2/2 The relation between structure and R_f value is discussed.
L. J. U. *[Signature]*

PROCHAZKA, Z.

Chromatography on polyamide.

CHEMICKE LISTY (Chekoslovenska akademie ved. Ceskaslovenska spotlenost chemicks) Paraha, Czechoslovakia. Vol.53, no.9, Sept.1959.

Monthly List of East European Accessions (EEAI) LC, Vol.9, no.1, Jan.1960.

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"Study of the Production of Complete and Incomplete Antibodies Against *Salmonella Cholerae Suis* in Piglets During their Ontogenetic Development."

Prague, Veterinarni Medicina, Vol 11, No 11, Nov 66, pp 675-682

Abstract /Author's English summary modified/: Dynamics of the production of antibodies were studied by administering bacterial antigen to piglets between the 1st and 6th week of life. A formaldehyde inactivated culture of *Salmonella cholerae suis* with a lipoid adjuvant was used for subcutaneous vaccination. In piglets fed on mothers milk antibody production appeared at the age of 30 days, regardless of when the antigen was administered. When vaccination was administered in the 3rd week, antibody production started in 6 days. Full antibody production was achieved when vaccination was made at the age of 5 weeks. 2 Tables, 12 Western, 4 Czech references. (Manuscript received 25 Nov 65).

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TOMANEK, J.; PROCHAZKA, Z.; Research Institute of Veterinary Medicine (Vyzkumny Ustav Veterinarniho Lekarstvi), Brno-Medlany.

"Determination of Complement-Fixing Antibodies in Bovine Dictyocaulosis by Means of an Antigen Prepared from Ascaris Suum."

Prague, Veterinarni Medicina, Vol 12, No 1, Jan 67, pp 35 - 42

Abstract /Authors' English summary modified/: In bullocks experimentally infected with 2,000 infective larvae of *Dictyocaulus viviparus* and reinfected with the same dose after 31 days complement-fixing antibodies were determined using an antigen prepared from adult worms of *Ascaris suum* according to Stewart. A good correlation between the titers obtained using antigens prepared from *Dictyocaulus viviparus* and that from *Ascaris suum* was found. A significant rise in the titer occurred 3 weeks after the infection, and the titer remained high for 3 weeks after the re-infection. 1 Figure, 3 Tables, 14 Western references. Manuscript received 27 May 66.

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